Members of the commission:

I would like to submit comments opposed to the Garmin petition for GPS location information to be sent via F2D on GMRS frequencies.

The purpose of the GMRS service is to facilitate short distance communications for families. The recent rise in the availability of off the shelf "bubble pack" radios has already made the GMRS frequencies crowded in some areas, and unusable in others.

Many bubble pack users do not understand or do not abide by the license requirements for GMRS. These unlicensed users, on bubble pack radios often transmit call tones provided by the manufacturer on the GMRS frequencies without listening, and without heed for other operations, thus causing harmful interference.

The petition by Garmin will only add to the harmful interference. There are only 8 frequencies assigned for GMRS operations. There are the additional interstitial channels which are shared with FRS which are not used by repeater operations. These frequencies are already congested due to their inclusion in the "bubble pack" radios. The majority of users of these frequencies are unlicensed purchasers of bubble pack radios.

Garmin claims that the increased range would serve the public interest. However, there is no evidence to support this. The fact that Garmin is the sole supplier of GPS equipped FRS radios, and that they do not hold a sizeable market share in this market, leads me to doubt the extent of the demand for this product.

In addition, the claims of increased range available in the GMRS service versus the FRS service on these frequencies is also suspect. It is well known in technical circles that the range of a radio in the UHF spectrum is determined primarily by antenna height and gain of transmitter and reciever, not by power output of the transmitter. An excellent example of this principle is my local 2 meter repeater which has an output of only 3 watts, but covers a large area because of high gain antennas mounted on tall commercial towers. A GMRS repeater in Phoenix covers a large portion of the state with only 15 watts output because of an advantageous siting on top of a mountain. Thus the key to range is not the power output of the unit, but the antenna height and gain. Garmin is limiting the proposal to units with fixed, non-detachable antennas. Such antennas are known to be highly inefficent, and limit the range of units to much less than the theoretical maximum.

One must also take into account that there are those who will design modifications that will permit the attachment of external antennas to these units. Where such modifications will void the type acceptance, they are nonetheless performed because of the low chance of getting caught combined with the perceived reward of additional distance. One can only speculate that these radios are potentially modifiable in other ways as well, for other frequencies or other additional power output, given the right level of technical expertise and the will to do so.

In a previous finding relating to the FRS service, the commision ruled that "rule modifications were in the public interest because the modifications allowed a new and incidental use for FRS...to locate lost or injured persons". The FCC has already approved the sale and manufacture of personal locator beacons for this very use. If the public believes that these handheld units would serve the purpose of locating lost or injured persons, they would be less likely to purchase and/or carry the personal locator beacons. These beacons are sattelite tracked, and enable timely and accurate dispatch of emergency personel to the exact location of the person. A handheld GMRS unit will have significantly shorter range, less accuracy, and therefore a false sense of security. Thus the rescue of a lost or injured person would be hindered, not helped by the possession of one of these units. Where the usefulness of these units in a non-emergency case (ie a family meeting a theme park or other public area) can be demonstrated, these areas tend to be highly congested, thereby reducing the range and usefulness of these units.

Lastly, Garmin makes no provision or guarantee that these units will only be distributed and used by licensed users of the GMRS spectrum. It is well known that the prevalence of GMRS handheld radios in

the open market has caused congeestion and interference to the licensed users of the spectrum. By adding this "feature" to a radio in the open market, one can only suspect that this congestion and interference by unlicensed users will continue. Even worse, the potential for abuse by corporations and business users desiring to use the functionality without purchasing proper licenses exists.

In short, approval of this request in any form represents a clear potential for harmful interference which cannot be controlled due to its nature and lack of identification. This interference would adversely affect users of the GMRS service.

Therefore this petition should be denied.

Sincerely,

Tony Drake